UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

25297

7590

08/17/2010

JENKINS, WILSON, TAYLOR & HUNT, P. A. Suite 1200 UNIVERSITY TOWER 3100 TOWER BLVD., DURHAM, NC 27707

EXAMINER

SAJJADI, FEREYDOUN GHOTB

ART UNIT PAPER NUMBER

1633

DATE MAILED: 08/17/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,980	04/07/2005	Andrea Amalfitano	180/151 PCT/US	7130

TITLE OF INVENTION: VIRAL VECTORS AND METHODS FOR PRODUCING AND USING THE SAME

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	11/17/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS; This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ap in m

appropriate. All further indicated unless correct maintenance fee notification.	correspondence including ed below or directed othe tions.	ng the Patent, advance on the parties of the Patent, advance on the Patent of the Pate	rders and notification of n a) specifying a new corres	naintenance fees w pondence address;	vill be and/or	mailed to the current (b) indicating a sepa	correspondence address as rate "FEE ADDRESS" for
CURRENT CORRESPOND	ENCE ADDRESS (Note: Use Bi	Fee(	c) Transmittal Thi	is certif	icate cannot be used f	r domestic mailings of the or any other accompanying nt or formal drawing, must	
	7590 08/17 LSON, TAYLOR VERSITY TOWER	I hei State	Cer eby certify that these Postal Service w	tificate is Fee(	e of Mailing or Transis s) Transmittal is being		
DURHAM, NC			trans	sinitied to the USF	10 (37	1) 2/3-2863, on the d	(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/511,980	04/07/2005	•	Andrea Amalfitano		180/151 PCT/US		7130
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nonprovisional	YES	\$755 •	\$300	\$0 I		\$1055	11/17/2010
EXAM		ART UNIT	CLASS-SUBCLASS				
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CFR 1.363).  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.				
PLEASE NOTE: Un	less an assignee is ident th in 37 CFR 3.11. Comp	ified below, no assignee	THE PATENT (print or typ data will appear on the pa T a substitute for filing an : (B) RESIDENCE: (CITY	ntent. If an assign			ocument has been filed for
Please check the appropri	riate assignee category or	categories (will not be pa	rinted on the patent):	Individual 🖵 Co	orporati	on or other private gro	oup entity 🔲 Government
4a. The following fee(s) are submitted:  ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			Bb. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)  A check is enclosed.  Payment by credit card. Form PTO-2038 is attached.  The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
5. Change in Entity Sta	ntus (from status indicate ns SMALL ENTITY state	*	☐ b. Applicant is no long	ger claiming SMAl	LL EN'	ГІТҮ status. See 37 СІ	FR 1.27(g)(2).
NOTE: The Issue Fee an interest as shown by the	nd Publication Fee (if req records of the United Sta	uired) will not be accepte ttes Patent and Trademark	ed from anyone other than the Office.	ne applicant; a regi	stered	attorney or agent; or th	e assignee or other party in
Authorized Signature				Date			
Typed or printed name			Registration No.				
an application. Confiden submitting the complete this form and/or suggest	tiality is governed by 35 d application form to the ions for reducing this bu /irginia 22313-1450. DO	U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to th	on is required to obtain or r 1.14. This collection is est depending upon the indiv te Chief Information Office COMPLETED FORMS TO	imated to take 12 i idual case. Any co r. U.S. Patent and	minutes mment Trader	s to complete, including s on the amount of tirg nark Office, U.S. Depa	g gathering, preparing, and ne you require to complete artment of Commerce, P.O.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

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25297 75	90 08/17/2010		EXAM	INER
JENKINS, WILS	ON, TAYLOR & H	SAJJADI, FEREYDOUN GHOTB		
Suite 1200 UNIVE		ART UNIT	PAPER NUMBER	
3100 TOWER BLY DURHAM, NC 27			1633 DATE MAILED: 08/17/201	0

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)					
	10/511,980	AMALFITANO ET AL.					
Notice of Allowability	Examiner	Art Unit					
	FEREYDOUN G. SAJJADI	1633					
The MAILING DATE of this communication appeal claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this a or other appropriate communication is subject IGHTS. This application is subject	correspondence address application. If not included on will be mailed in due course. THIS					
1. This communication is responsive to <u>7/29/2010</u> .							
2. The allowed claim(s) is/are <u>1-3,5-9,16-58,67 and 143-148</u> .							
<ol> <li>Acknowledgment is made of a claim for foreign priority ur</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li> <li>1. ☐ Certified copies of the priority documents have</li> <li>2. ☐ Certified copies of the priority documents have</li> <li>3. ☐ Copies of the certified copies of the priority do International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> </ol>	e been received. e been received in Application No.	<del></del>					
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		ly complying with the requirements					
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give							
5. CORRECTED DRAWINGS ( as "replacement sheets") mus	st be submitted.						
(a) 🔲 including changes required by the Notice of Draftspers	son's Patent Drawing Review ( PT	O-948) attached					
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date	•						
Paper No./Mail Date	(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date						
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t							
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT	sit of BIOLOGICAL MATERIAL FOR THE DEPOSIT OF BIOLOGI	_ must be submitted. Note the ICAL MATERIAL.					
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☑ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 7/29/2010  4. ☐ Examiner's Comment Regarding Requirement for Deposit	5. ☐ Notice of Informal 6. ☐ Interview Summa Paper No./Mail D 7. ☐ Examiner's Amen 8. ☑ Examiner's Stater	ry (PTO-413), Date					
of Biological Material	9.						
/Fereydoun G Sajjadi/ Primary Examiner, Art Unit 1633							

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Art Unit: 1633

### **DETAILED ACTION - ALLOWANCE**

#### Claim Status

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed July 29, 2010, in the form of an IDS, has been entered. No claims have been amended, cancelled, or newly added. Accordingly, claims 1-3, 5-9, 16-58, 67 and 143-148 are pending in the application.

### **REASONS FOR ALLOWANCE:**

The following is an examiner's statement of reasons for allowance:

The closest prior art of record describing a recombinant hybrid Ad/AAV vector, is that of Lieber et al. However, Lieber et al. indicated that the packaging of their hybrid vector in a helper 293 packaging cell line resulted in contaminating Ad.AAV that required subsequent removal.

Applicants' Declaration under 37 CFR 1.132 demonstrates that the instantly claimed hybrid virus is superior in producing AAV particles essentially free of contaminating adenovirus, following introduction of the hybrid vector into a 293 helper cell line. While the prior art of Mountz et al. describes the production of AAV virus with little to no contaminating adenovirus present, Mountz et al. require the co-transfection with two separate recombinant adenovirus vectors, where the timing and concentration of the two viruses has to be optimized. The prior art references supplied by Applicants do not affect the patentability of the instant claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claims 1-3, 5-9, 16-58, 67 and 143-148 are allowed.

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Art Unit: 1633

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FEREYDOUN G. SAJJADI whose telephone number is (571)272-3311. The examiner can normally be reached on 6:30 AM-3:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Woitach can be reached on (571) 272-0739. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Fereydoun G Sajjadi/ Primary Examiner, Art Unit 1633